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EXAMINER

OYEBISI, OJO O

ART UNIT	PAPER NUMBER
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3628

DATE MAILED: 10/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

*Office Action Summary*

Application No.

09/751,892

Applicant(s)

STARKMAN, HARTLEY C.

Examiner

OJO O. OYEBISI

Art Unit

3628

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 and 16-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 and 16-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-14, 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kosiba et al (Kosiba hereinafter, U.S. PAT: 6,098,052) in view of Regan (U.S. PAT: 6,898,574).

Re claim 1. Kosiba discloses a method for predicting loan collections for a group of non-stationary asset-based loans using a computer system configured with a collections model and a re-marketing model (i.e., computer models that compute an estimate, for each possible collection strategy, as to how much will be paid on each account in response to that collection strategy, computes an estimate as for the amount of resources to be expended in the execution of that collection strategy, see col.1, lines 1-15), the group of non-stationary asset-based loans included within a distressed loan portfolio, an account including at least one of the loans, said method comprising the steps of:

utilizing the computer and the collections model to predict a payment behavior for a borrower of a non-stationary asset-based loan included within a distressed loan portfolio, the collections model is based on historical payment information of the borrower, loan delinquency assumptions, and a plurality of collection strategies

that may be utilized for collecting payment from the borrower, non-stationary asset based loans include at least one of automobile loans, and vehicle loans(see col.1, lines 1-15, also see col.2, lines 10-30, also col.19, lines 17-25); initiating at least one of the plurality of collection strategies with respect to the borrower; analyzing the borrower's payment behavior after initiating the at least one collection strategy including whether the borrower made a payment and, if so, an amount of the payment(i.e., whether the minimum monthly payment was made, see col.18, lines 33-37); comparing the borrower's payment behavior after initiating the at least one collection strategy to the predicted payment behavior of the borrower (see col.18, lines 33-40); the re-marketing model (i.e., computer models that compute an estimate, for each possible collection strategy, as to how much will be paid on each account in response to that collection strategy, computes an estimate as for the amount of resources to be expended in the execution of that collection strategy, see col.1, lines 1-15) further calculates a probability that an event will occur impacting payment of the borrower's loan (see col.15, lines 30-50); generating delinquency moving matrices for each loan included within the group of loans including the borrower's loan based on an output from the collections model and the re-marketing model (i.e., The consumer experience evaluation model (32) generates an estimate of these metrics for each delinquent consumer in need of a strategy, for every possible consumer experience (14). Delinquent accounts being run through the model, see col.15, lines 7-20), the matrices displaying for each account a percentage

indicating a probability that the account will roll forward into a next classification of delinquency (see col.4, lines 25-30, see col. 2, lines 40-45), and a number of months that the account is delinquent (see col.5, lines 15-25, also see col.13, lines 60-67); and predicting which accounts will roll forward into a next classification of delinquency based on information displayed in the matrices (i.e., It is a further object to determine which delinquent accounts should be targeted to minimize negative rolling and to maximize total collections, see col. 2, lines 40-45). Kosiba does not explicitly disclose utilizing the computer and the re-marketing model to calculate an amount generated and expenses incurred from repossessing the non-stationary asset used as collateral for the borrower's loan. However, Regan makes this disclosure (i.e., once the unit has been seized, an appraisal agent can be assigned to appraise the unit, see col.9, lines40-60, also see the abstract). Thus, it would have obvious to one of ordinary skill in the art to combine kosiba and Regan in order to recommend an efficient collection strategy for each account that optimizes the use of available collection resources.

Re claim 2. Kosiba further discloses a method wherein said step of generating delinquency moving matrices further comprises the step of:

assigning probability distributions to loan delinquency assumption

(i.e., probability distribution of the consumer's experience, see col.10, line 20-25);

and inputting the loan delinquency assumptions and the assigned probability

distributions into the collections model and the re-marketing model to predict a

payment behavior for a borrower of a non-stationary asset-based loan included within the distressed loan portfolio (see col.12, lines 40-50).

Re claim 3. Kosiba further discloses a method wherein said step of assigning probability distributions to loan delinquency assumptions further comprises the step of determining a percentage of loans within the probability distributions that will roll forward into a next period of delinquency (i.e., It is a further object to determine which delinquent accounts should be targeted to minimize negative rolling and to maximize total collections, see col. 2, lines 40-45, also see col.4, lines 25-30).

Re claim 4. Kosiba further discloses a method further comprising the step of indicating a number of months an account is delinquent (see col.5, lines 15-25, also see col.13, lines 60-67).

Re claim 5. Kosiba further discloses a method according to wherein said step of generating delinquency moving matrices further comprises the step of adjusting loan delinquency assumptions to account for variations in a plurality of forces impacting a payment behavior of a borrower including at least one of time of season, changes in political climate, interest rate changes, and a likelihood that a natural disaster may occur (i.e., If it is determined that seasonality is significant, the model (10) can include "seasonality factors" in the estimates of  $P[MMP]$  and  $E[\%FDA]$ , every consumer and every consumer experience (14). For example, if it turns out that  $P[MMP]$  is reduced by 10% in January, the model (10) can multiply the consumer experience's original  $P[MMP]$  estimate by 0.9, for every

consumer experience and every consumer., see col.15, lines 25-35, also the learning model can start a process that recalibrates the impact parameters using all the most recent data, see col.16, lines 1-10).

Re claim 6. Kosiba does not explicitly disclose a method further comprising the step of adjusting probability distributions assigned to the loan delinquency assumptions to account for adjustments made to the loan delinquency assumptions. However, Kosiba discloses a learning model that ensures that the model is not stagnant. As the delinquent population changes, the learning model ensures that the model reacts to those changes. Thus, since the model responds, automatically, to changes in delinquent population, it would be obvious that probability distribution assigned to that delinquent population would also change.

Re claim 7. Claim 7 recites similar limitations to claim 1, thus is rejected using the same art and rationale in the rejection of claim 1.

Re claim 8. Kosiba further discloses a method wherein said step of predicting a portfolio value further comprises the step of predicting a cash flow value for a portfolio (i.e., estimate how much will be on each account in response to that collection strategy, see abstract, also see col.3, lines 15-35).

Re claim 9. Kosiba discloses a system for determining loan collections for a group of non-stationary asset-based loans included within a distressed loan portfolio, an account including at least one of the loans, said system comprising: a server configured with a collections model and a re-marketing model; at least one

computer; and a network connecting said server to said at least one computer, said server configured to;

access the collections model to predict a payment behavior for a borrower of a non-stationary asset-based loan included within a distressed loan portfolio, the collections model is based on historical payment information of the borrowers, loan delinquency assumptions, and a plurality of collection strategies that may be utilized for collecting payment from the borrower, non-stationary asset based loans include at least one of automobile loans, and vehicle loans (see col.1, lines 1-15, also see col.2, lines 10-30, also see col.19, lines 17-25); analyze the borrower's payment behavior after initiating the at least one collection strategy including whether the borrower made a payment and, if so, an amount of the payment(i.e., whether the minimum monthly payment was made, see col.18, lines 33-37); compare the borrower's payment behavior after initiating the at least one collection strategy to the predicted payment behavior of the borrower (see col.18, lines 33-40); the re-marketing model (i.e., computer models that compute an estimate, for each possible collection strategy, as to how much will be paid on each account in response to that collection strategy, computes an estimate as for the amount of resources to be expended in the execution of that collection strategy, see col.1, lines 1-15) further calculates a probability that an event will occur impacting payment of the borrower's loan (see col.15, lines 30-50); generate matrices for delinquency, gross value, stock value, roll forward, roll back, amounts due and payment for each loan included within the group of loans



including the borrower's loan, the matrices including data generated from the collections model and the re-marketing model (i.e., The consumer experience evaluation model (32) generates an estimate of these metrics for each delinquent consumer in need of a strategy, for every possible consumer experience (14). Delinquent accounts being run through the model, see col.15, lines 7-20, also see col.4, lines 25-30, see col. 2, lines 40-45), and predict a portfolio value for the distressed loan portfolio using the matrices (i.e., It is a further object to determine which delinquent accounts should be targeted to minimize negative rolling and to maximize total collections, see col. 2, lines 40-45) and a network connecting said computer to said sever (see fig.1B). Kosiba does not explicitly disclose access the re-marketing model to calculate an amount generated and expenses incurred from repossessing the non-stationary asset used as collateral for the borrower's loan. However, Regan makes this disclosure (i.e., once the unit has been seized, an appraisal agent can be assigned to appraise the unit, see col.9, lines40-60, also see the abstract). Thus, it would have obvious to one of ordinary skill in the art to combine kosiba and Regan in order to recommend an efficient collection strategy for each account that optimizes the use of available collection resources.

Re claim 10. Kosiba further discloses a system wherein said server further configured to: assign probability distributions to loan delinquency assumptions (i.e., probability distribution of the consumer's experience, see col.10, line 20-25); and input the loan delinquency assumptions and the assigned probability

distributions into the collections model and the re-marketing model to predict a payment behavior for a borrower of a non-stationary asset-based loan included within the distressed loan portfolio (see col.12, lines 40-50).

Re claim 11. Kosiba further discloses a system wherein said server further Configured to determine a percentage of loans within the probability distributions that will roll forward into a next period of delinquency (i.e., It is a further object to determine which delinquent accounts should be targeted to minimize negative rolling and to maximize total collections, see col. 2, lines 40-45, also see col.4, lines 25-30).

Re claim 12. Kosiba further discloses a system wherein said server further configured to indicate a number of months an account is delinquent (see col.5, lines 15-25, also see col.13, lines 60-67).

Re claim 13. Kosiba further discloses a system wherein said server further Configured to adjust loan delinquency assumptions to account for variations in a plurality of forces impacting a payment behavior of a borrower including at least one of time of season, changes in political climate, interest rate changes, and a likelihood that a natural disaster may occur (i.e., If it is determined that seasonality is significant, the model (10) can include "seasonality factors" in the estimates of  $P[MMP]$  and  $E[\%FDA]$ ., every consumer and every consumer experience (14). For example, if it turns out that  $P[MMP]$  is reduced by 10% in January, the model (10) can multiply the consumer experience's original  $P[MMP]$

estimate by 0.9, for every consumer experience and every consumer., see col.15, lines 25-35).

Re claim 14. Kosiba does not explicitly disclose a system wherein said server further configured to adjust probability distributions based on loan assumption adjustment. However, Kosiba discloses a learning model that ensures that the model is not stagnant. As the delinquent population changes, the learning model ensures that the model reacts to those changes. Thus, since the model responds, automatically, to changes in delinquent population, it would be obvious that probability distribution assigned to that delinquent population would also change or adjust.

Re claim 16. Kosiba further discloses a system wherein said network is at least one of a WAN or a LAN (see fig.1B).

Re claim 17. Claim 17 recites similar limitation to claim 9 and thus rejected using the same art and rationale in the rejection of claim 9.

Re claim 18. Kosiba further discloses a system wherein said server configured to predict a cash flow value for a portfolio (i.e., estimate how much will be on each account in response to that collection strategy, see abstract, also see col.3, lines 15-35).

***Response to Arguments***

3. The rejections to claims 1-14, and 16-18 under 35 U.S.C. 112, first paragraph have been withdrawn. However, applicant's arguments, filed October 21, 2004, with respect to said claims 1-14, and 16-18 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to OJO O. OYEBISI whose telephone number is (571) 272-8298. The examiner can normally be reached on 8:30A.M-5:30P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, HYUNG S. SOUGH can be reached on (571)272-6799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
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